

WHAT IS CLAIMED IS:

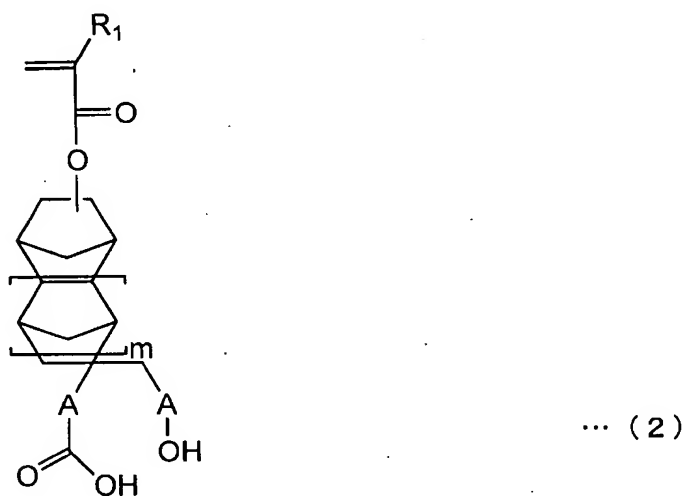
1. A negative-working resist material comprising at least a polymeric compound and an acid generating agent, wherein the polymeric compound has a polymerizable unit having a polymerizable main chain moiety and a
5 hydroxy acid moiety bound to said main chain moiety as a side chain component, the hydroxyl moiety is bound to the main chain moiety via only one carbon in the carbon skeleton of the hydroxy acid, and a space of such size as to permit an alkali substance to approach a binding site between the hydroxy acid moiety and the main chain moiety is not present between the
10 hydroxy acid moiety and the main chain moiety.
2. The negative-working resist material according to claim 1, wherein the hydroxyl acid moiety and the main chain moiety are bound directly to each other by which the space of such size as to permit an alkali substance to
15 approach the binding site therebetween is not present.
3. The negative-working resist material according to claim 1, wherein the hydroxy acid moiety and the main chain moiety are bound to each other via a cyclic moiety, and the space of such size as to permit an alkali substance to
20 approach the binding site therebetween is not present due to the presence of the cyclic moiety.
4. The negative-working resist material according to claim 2, wherein the polymerizable unit is a unit represented by the following general formula (1):

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wherein R_1 is a hydrogen atom or an alkyl group having 1 to 5 carbon atoms,
 and A is a nitrogen atom, a sulfur atom, or an alkyl group having 1 to 21
 5 carbon atoms.

5. The negative-working resist material according to claim 3, wherein the
 polymerizable unit is a unit represented by the following general formula (2):

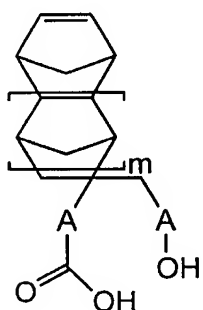


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wherein R_1 is a hydrogen atom or an alkyl group having 1 to 5 carbon atoms,
 A is a nitrogen atom, a sulfur atom, or an alkyl group having 1 to 21 carbon
 atoms, and m is an integer of 0 to 3.

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6. The negative-working resist material according to claim 3, wherein the polymerizable unit is a unit represented by the following general formula (3):

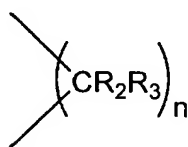


... (3)

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wherein A is a nitrogen atom, a sulfur atom, or an alkyl group having 1 to 21 carbon atoms, and m is an integer of 0 to 3.

7. The negative-working resist material according to claim 4, wherein A
10 in the general formula representing the polymerizable unit is an alkyl group
represented by the following general formula (4):



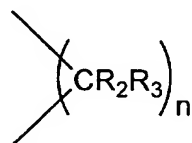
... (4)

15 wherein each of R₂ and R₃ is an alkyl group having 1 to 3 carbon atoms, and n
is an integer of 1 to 3.

8. The negative-working resist material according to claim 7, wherein the alkyl group represented by R_2 and/or R_3 is a fluoroalkyl group.

9. The negative-working resist material according to claim 4, wherein A
5 in the general formula representing the polymerizable unit is an alkyl group having 1 to 5 carbon atoms.

10. The negative-working resist material according to claim 5, wherein A
in the general formula representing the polymerizable unit is an alkyl group
10 represented by the following general formula (4):



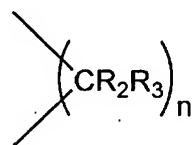
... (4)

wherein each of R_2 and R_3 is an alkyl group having 1 to 3 carbon atoms, and n
15 is an integer of 1 to 3.

11. The negative-working resist material according to claim 10, wherein the alkyl group represented by R_2 and/or R_3 is a fluoroalkyl group.

20 12. The negative-working resist material according to claim 5, wherein A in the general formula representing the polymerizable unit is an alkyl group having 1 to 5 carbon atoms.

13. The negative-working resist material according to claim 6, wherein A in the general formula representing the polymerizable unit is an alkyl group represented by the following general formula (4):



... (4)

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wherein each of R₂ and R₃ is an alkyl group having 1 to 3 carbon atoms, and n is an integer of 1 to 3.

10 14. The negative-working resist material according to claim 13, wherein the alkyl group represented by R₂ and/or R₃ is a fluoroalkyl group.

15 15. The negative-working resist material according to claim 6, wherein A in the general formula representing the polymerizable unit is an alkyl group having 1 to 5 carbon atoms.

16. A method of forming a resist pattern, which comprises a step of forming a photoresist pattern by forming at least a photoresist layer with the negative-working resist material of claim 1 on a substrate and subjecting the photoresist layer to light exposure and development treatments to form a predetermined photoresist pattern.

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